

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

MOBILE MOTHERBOARD INC.,

Plaintiff,

v.

ASUSTEK COMPUTER INC.,

Defendant.

C.A. No. 6:23-cv-325

JURY TRIAL DEMANDED

PATENT CASE

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Mobile Motherboard Inc. files this Complaint for Patent Infringement against AsusTek Computer Inc. pursuant to Rule 15(a)(1)(A), Fed.R.Civ.P., and would respectfully show the Court as follows:

I. THE PARTIES

1. Plaintiff Mobile Motherboard Inc. (“Mobile Motherboard” or “Plaintiff”) is a Texas corporation with its address at P.O. Box 420996 Houston, TX 77242-0996.

2. On information and belief, Defendant AsusTek Computer Inc. (“Defendant”) is a corporation organized and existing under the laws of Republic of Taiwan with a principal place of business at No. 15 Li-Te Road, Beitou District, Taipei City 112, Taiwan.

II. JURISDICTION AND VENUE

3. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has subject matter jurisdiction of such action under 28 U.S.C. §§1331 and 1338(a).

4. On information and belief, this Court has personal jurisdiction over Defendant because Defendant has committed, and continue to commit, acts of infringement in this District,

have conducted business in this District, and/or have engaged in continuous and systematic activities in this District. Defendant is subject to this Court's general personal jurisdiction pursuant to due process and/or the Texas Long Arm Statute, Tex. Civ. Prac. & Rem. Code § 17.042, due at least to its substantial business conducted in this District, including: (i) having solicited and transacted business in Texas, including benefits directly related to the instant patent infringement causes of action set forth herein; (ii) having placed its products and services into the stream of commerce throughout the United States and having been actively engaged in transacting business in Texas and in this District, and (iii) having committed the complained of tortious acts in Texas and in this District.

5. Venue is proper as to Defendant because 28 U.S.C. § 1391(c)(3) provides that “a defendant not resident in the United States may be sued in any judicial district, and the joinder of such a defendant shall be disregarded in determining where the action may be brought with respect to other defendants.”

III. UNITED STATES REISSUED PATENT NO. RE48,365

6. On December 22, 2020, United States Reissued Patent No. RE48,365 (“the RE’365 Patent”) was duly and legally issued by the United States Patent and Trademark Office. The RE’365 Patent is titled “Mobile Motherboard.” A true and correct copy of the RE’365 Patent is attached hereto as Exhibit A and incorporated herein by reference.

7. Mobile Motherboard is the assignee of all right, title, and interest in the RE’365 Patent, including all rights to enforce and prosecute actions for infringement and to collect damages for all relevant times against infringers of the RE’365 Patent. Accordingly, Mobile Motherboard possesses the exclusive right and standing to prosecute the present action for infringement of the RE’365 Patent by Defendant.

IV. FACTUAL BACKGROUND

8. The invention in the RE'365 Patent relates to the field of computers, more particularly to a motherboard for a computer. (Ex. A at col. 1:12-13). The objective of a mobile motherboard is to provide the “brains” of the computer device. (*Id.* at col. 1:18-21).

9. At the time the patent application was filed, a personal computer set up in a home would generally be useable only from the home. As such, these computers were geographically limited because motherboard sat inside a computer box. (*Id.* at col. 1:18-19, 1:35-36).

10. The claimed inventions provide an external motherboard that is portably configured to serve more than one computer device. (*Id.* at col. 1:50-52). The location of portable motherboard external to the computer box improves the heat dissipation properties of the motherboard by exposing the motherboard to the natural air flow in the environment instead of confining the heat dissipation from the motherboard to the use of forced air inside of a closed computer box. (*Id.* at col. 4:29-36).

11. The portable motherboard provides a brain to a computer box without a processor. (*Id.* at col. 4:54-55). Where a computer with a brain is slow, the portable motherboard may be used to boost the brainpower of the slow computer.

12. Whether the portable motherboard brings life to a computer box or boosts the microprocessor power of a computer containing an internal microprocessor, the portable motherboard is a powerful invention that makes microprocessor power more efficient and ubiquitous. (*Id.* at col. 4:61-65).

V. ACCUSED ACTIVITIES AND INSTRUMENTALITIES

13. On information and belief, Defendant makes, uses, sells and offers for sale Accused Products, including but not limited to the VivoStick PC (TS10) (“Accused

Instrumentality,” *see*, for example, <https://www.asus.com/us/displays-desktops/mini-pcs/stick-pcs/vivostick-pc-ts10/>) for combination with an HD TV, monitor, or projector for smart screen display in a manner that infringes at least claim 1 of the RE’365 Patent.

14. On information and belief, end users and others (including Defendant’s partners and customers, to whom Defendant offers to sell and sells the Accused Instrumentalities to use, test, and operate in the United States, including within this judicial district, mobile motherboard technology in conjunction with an HD TV, monitor, or projector for smart screen display) infringe at least claim 1 of the RE’365 Patent by combining the Accused Instrumentalities and an HD TV, monitors, or projectors in a manner that infringes the RE’365 Patent.

COUNT I – INFRINGEMENT OF THE RE’365 PATENT

15. Plaintiff repeats and incorporates by reference the allegations in Paragraphs 1-14. above.

16. On information and belief, the systems of the Accused Instrumentalities with an HD TV, monitors, or projectors are a computer system. The system of the Accused Instrumentalities includes a computer system configured with basic, complete, and functional hardware and software setup with everything needed to implement computing performance.

VivoStick PC (TS10)

[Overview](#) [Tech Specs](#) [Review](#) [Support](#)

ASUS estore price ⓘ \$140.00

[Notify me](#)

A PC in hand, whenever you need it

- A PC, when and where you need it – enjoy the convenience of a PC in your pocket
- Full PC functionality – turn any HDMI-equipped monitor, TV, or projector into a PC
- Everyday computing at its very best – surf the web, check emails and get your work done
- Convert your TV into a smart TV – view HD videos, and keep up with friends and family on social media on your large screen TV
- Home entertainment hub – Stream and mirror HD content with ASUS HyStream; use your mobile device as a remote with ASUS VivoRemote
- Ideal for businesses – a cost-effective, energy-efficient solution for offices, signage and kiosks, or those on the go
- Fast and productive performance – Intel® Atom™ quad-core processor with 2GB memory and 32GB of onboard storage
- Extensive connectivity – 802.11ac Wi-Fi, Bluetooth 4.1, USB 3.0 and USB 2.0 ports, and an audio output jack
- Bundled VivoStick Holder for versatile placement options
- Cool and reliable performance – VivoStick features an internal cooling fan to prevent overheating
- Built-in security – TPM support, anti-theft security buzzer and notch



(<https://www.asus.com/us/displays-desktops/mini-pcs/stick-pcs/vivostick-pc-ts10/>)

17. The Accused Instrumentalities are necessarily used with HD TV, monitor, or projector that includes a computer box without a processor for performing computing operations, said computer box comprising: a housing; circuitry enclosed by said housing; a bus internal to said housing connected to said circuitry; and a first communication port for enabling electrical connection of circuitry external to said housing to said internal bus. For example, the HD TV, monitor, or projector (e.g., a computer box without a processor for performing computing

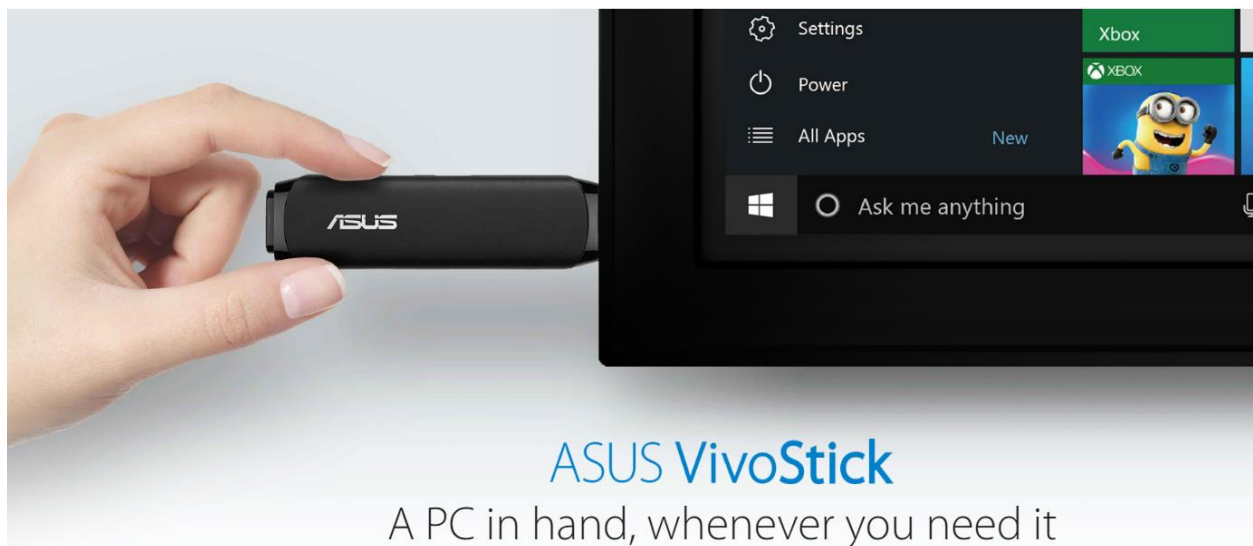
operations) includes a housing (e.g., the housing of the HD TV, monitor, or projector), circuitry enclosed by said housing (the circuitry inside the housing of the HD TV, monitor, or projector); a bus internal to said housing connected to said circuitry (e.g., the internal bus of the HD TV, monitor, or projector); and a first communication port for enabling electrical connection of circuitry external to said housing to said internal bus (e.g., the HD input of HD TV, monitor or projector).

VivoStick PC (TS10)

[Overview](#) [Tech Specs](#) [Review](#) [Support](#)

A PC in hand, whenever you need it

- A PC, when and where you need it – enjoy the convenience of a PC in your pocket
- Full PC functionality – turn any HDMI-equipped monitor, TV, or projector into a PC
- Everyday computing at its very best – surf the web, check emails and get your work done
- Convert your TV into a smart TV – view HD videos, and keep up with friends and family on social media on your large screen TV



(<https://www.asus.com/us/displays-desktops/mini-pcs/stick-pcs/vivostick-pc-ts10/>).

18. The Accused Instrumentalities are portable and handheldable and external to the housing.



ASUS VivoStick is a pocket-sized Windows PC that gives you desktop-like computing whenever you need it. It is powered by an Intel® Atom™ processor to turn any HDMI TV, display, or projector into a fully-functional PC for work or play. VivoStick opens up a world of computing possibilities for your home, office, or anywhere else you need it.

(<https://www.asus.com/us/displays-desktops/mini-pcs/stick-pcs/vivostick-pc-ts10/>).

19. The Accused Instrumentalities include a central processor and a motherboard bus connected to said central processor.

VivoStick PC (TS10)

Overview Tech Specs Review Support

Model VivoStick PC (TS10)

CPU Intel Atom Z8350

Graphics Integrated - Intel HD Graphics

Memory 2GB LPDDR3
4GB LPDDR3

Storage 32G eMMC
64G eMMC

(<https://www.asus.com/us/displays-desktops/mini-pcs/stick-pcs/vivostick-pc-ts10/techspec/>).

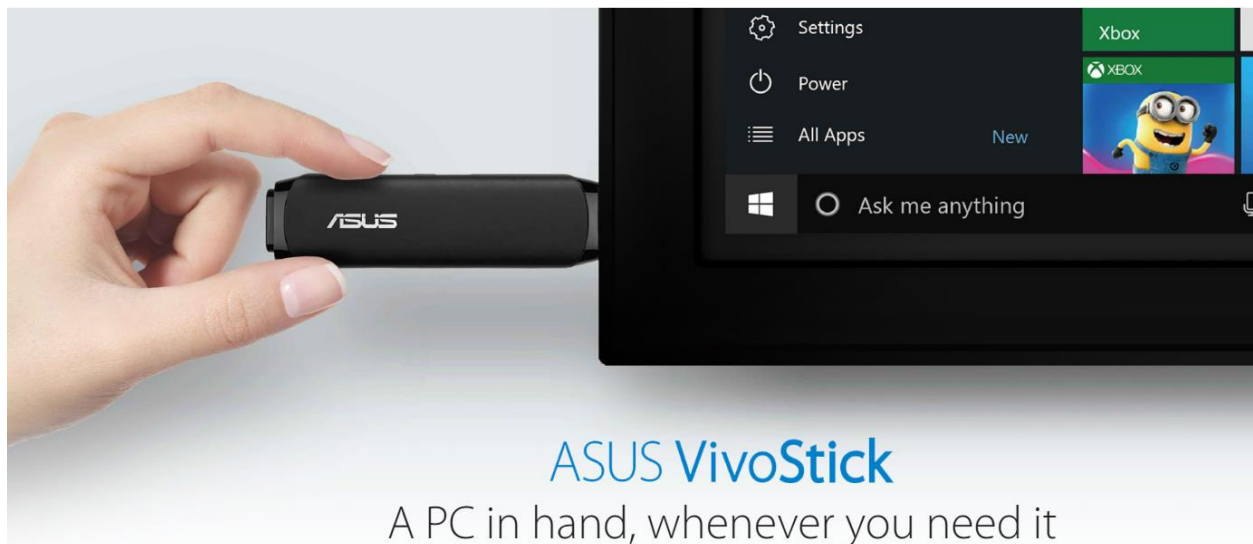
Processor (CPU)				
CPU Name	Intel® Atom™ x5-Z8350 CPU @ 1.44GHz			
Threading	1 CPU - 4 Core - 4 Threads			
Frequency	1919.21 MHz (24 * 79.97 MHz)			
Multiplier	Current: 24 / Max: 24			
Architecture	Cherry Trail / Stepping: D1 / Technology: 14 nm			
CPUID / Ext.	6.C.4 / 6.4C			
IA Extensions	MMX, SSE, SSE2, SSE3, SSSE3, SSE4.1, SSE4.2, EM64T, VT-x, AES			
Caches	L1D : 24 KB / L2 : 1024 KB			
Caches Assoc.	L1D : 6-way / L2 : 16-way			
Microcode	Rev. 0x410 ► Intel SA-00233 Vulnerable ◀			
Vcore	0.81 Volts			
Type	Retail (Stock Frequency : 1440 MHz)			
Cores Frequencies	#00: 1919.21 MHz	#01: 1679.31 MHz	#02: 1919.21 MHz	#03: 1919.21 MHz
Motherboard				
Model	AMI Corporation Intel Education Tablet			
Socket	Socket 1380 BGA			
North Bridge	Intel Braswell Host Bridge rev 36			
South Bridge	Intel Braswell LPC Bridge rev 36			
BIOS	American Megatrends Inc. MHCHT10A.86A.1030.2016.1104.1538 (11/04/2016)			

(<http://valid.x86.fr/iri3kt>).

20. The Accused Instrumentalities have a motherboard connector for engagement with said first communication port for enabling electrical connection of said central processor through said motherboard bus to said internal bus of said computer box. For example, the each Accused Instrumentality has an HDMI connector for connection into the HDMI port of the HD TV, monitor, or projector.



(<https://www.asus.com/us/displays-desktops/mini-pcs/stick-pcs/vivostick-pc-ts10/>)



(<https://www.asus.com/us/displays-desktops/mini-pcs/stick-pcs/vivostick-pc-ts10/>).

I/O Ports

1 x HDMI(male); 1 x USB3.0; 1 x USB2.0; 1 x Audio Jack; 1 x Micro-USB(power); 1 x Security Notch

(Id.).

21. The Accused Instrumentalities have one or more second communication ports for enabling electrical connection of circuitry external to said motherboard to said motherboard bus. For example, each Accused Instrumentality handles numerous communication ports, such as USB 3.0 port.

I/O Ports

1 x HDMI(male); 1 x USB3.0; 1 x USB2.0; 1 x Audio Jack; 1 x Micro-USB(power); 1 x Security Notch

(<https://www.asus.com/us/displays-desktops/mini-pcs/stick-pcs/vivostick-pc-ts10/>).

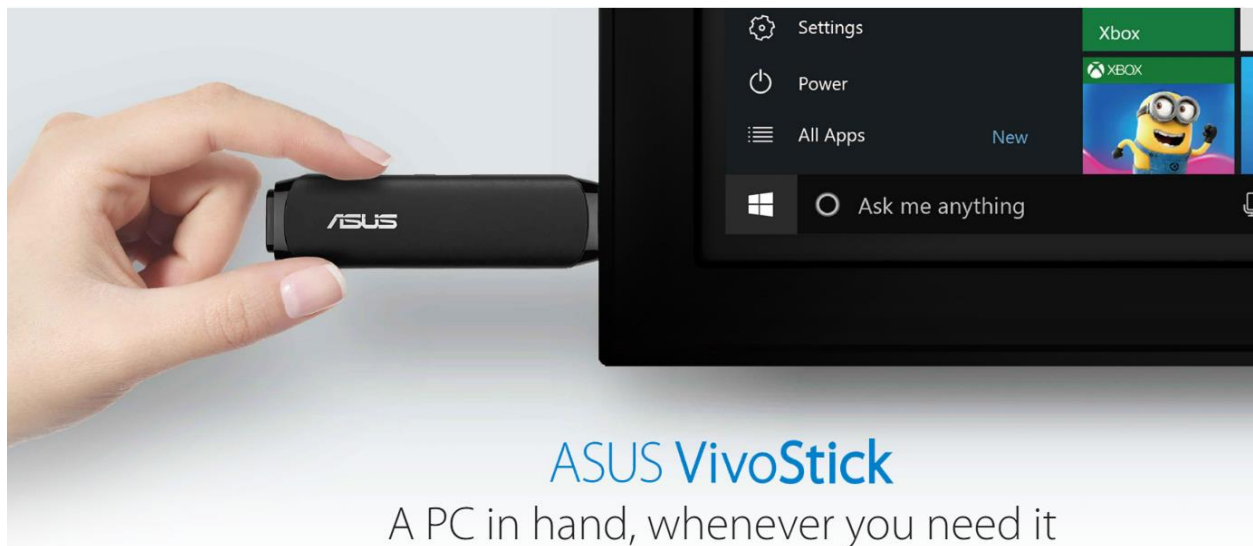


(Id.).

22. The Accused Instrumentalities connection of said motherboard connector to said first communication port enables said computer box to perform computing operations. For example, each Accused Instrumentality and HD TV, monitor, or projector connection enables the HD TV, monitor, or projector to perform Windows 10 computing operations and other operations.



(<https://www.asus.com/us/displays-desktops/mini-pcs/stick-pcs/vivostick-pc-ts10/>)



ASUS VivoStick is a pocket-sized Windows PC that gives you desktop-like computing whenever you need it. It is powered by an Intel® Atom™ processor to turn any HDMI TV, display, or projector into a fully-functional PC for work or play. VivoStick opens up a world of computing possibilities for your home, office, or anywhere else you need it.

(<https://www.asus.com/us/displays-desktops/mini-pcs/stick-pcs/vivostick-pc-ts10/>).

23. The Accused Instrumentalities includes Northbridge and Southbridge circuitry regardless how configured. For example, the Accused Instrumentalities includes a controller (e.g., Northbridge) that interconnects the Gemini processor (e.g., the central processor) to memory. The Accused Instrumentalities also include circuitry that handles I/O functions like the communication ports, such as USB 3.0 port and LAN port.

Processor (CPU)				
CPU Name	Intel® Atom™ x5-Z8350 CPU @ 1.44GHz			
Threading	1 CPU - 4 Core - 4 Threads			
Frequency	1919.21 MHz (24 * 79.97 MHz)			
Multiplier	Current: 24 / Max: 24			
Architecture	Cherry Trail / Stepping: D1 / Technology: 14 nm			
CPUID / Ext.	6.C.4 / 6.4C			
IA Extensions	MMX, SSE, SSE2, SSE3, SSSE3, SSE4.1, SSE4.2, EM64T, VT-x, AES			
Caches	L1D : 24 KB / L2 : 1024 KB			
Caches Assoc.	L1D : 6-way / L2 : 16-way			
Microcode	Rev. 0x410 ▶ Intel SA-00233 Vulnerable ◀			
Vcore	0.81 Volts			
Type	Retail (Stock Frequency : 1440 MHz)			
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Motherboard				
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(<http://valid.x86.fr/iri3kt>).

I/O Ports

1 x HDMI(male); 1 x USB3.0; 1 x USB2.0; 1 x Audio Jack; 1 x Micro-USB(power); 1 x Security Notch

(Id.).

VivoStick PC (TS10)	
Overview Tech Specs Review Support	
Model	VivoStick PC (TS10)
CPU	Intel Atom Z8350
Graphics	Integrated - Intel HD Graphics
Memory	2GB LPDDR3 4GB LPDDR3
Storage	32G eMMC 64G eMMC

(*Id.*).

COUNT I – INFRINGEMENT OF THE RE’365 PATENT

24. Plaintiff repeats and incorporates by reference the allegations in Paragraphs 1-23. above.

25. Defendant has no license or other authority from Mobile Motherboard Inc. or any other person or entity to practice the subject matter claimed by the RE’365 Patent.

26. On information and belief, end users and others (including Defendant’s partners and customers, to whom Defendant offers to sell and sells the Accused Instrumentalities to use, test, and operate in the United States, including within this judicial district, mobile motherboard technology in conjunction with an HD TV, monitor, or projector for smart screen display) infringe at least claim 1 of the RE’365 Patent by making, using, testing, and/or operating the Accused Instrumentalities with HD TVs, monitors, or projectors for smart screen display of their system.

27. On information and belief, Defendant offers to sell and sells the Accused Instrumentalities to others, including their partners, customers, and end users, knowing or willfully blind to the fact that these products constitute a material part of the RE'365 Patent patented invention. On information and belief, these products were especially made, or especially adapted for use in the infringement of the RE'365 Patent, and have no substantial non-infringing uses at least because they contain components whose only purpose is to practice the RE'365 Patent. The use, testing, and/or operating of the Accused Instrumentalities with HD TV, monitor, or projector for smart screen display constitute direct infringement of at least claims claim 1 of the RE'365 Patent.

28. Defendant affirmatively encourages and intends for its customers and clientele to use its motherboard solution including the Accused Instrumentalities in conjunction with other applications and processes, and in a manner that infringes at least claim 1 of the RE'365 Patent. Defendant promotes its motherboard solution including the Accused Instrumentalities for one thing only – to hook its motherboard solution including the Accused Instrumentalities to an HD TV, monitor, or projector for smart screen display. Use of its motherboard solution including the Accused Instrumentalities in such a manner infringes the RE'365 Patent. The Defendant's motherboard solution including the Accused Instrumentalities has no substantial noninfringing uses.

29. On information and belief, since becoming aware of the RE'365 Patent and of the infringement through advertising and offering for sale the Accused Instrumentalities for use by its customers, Defendant is and has been committing the act of inducing infringement by specifically intending to induce infringement by providing the Accused Instrumentality to its customers and by aiding and abetting its use in a manner known to infringe by Defendant. Since becoming aware

of the infringing use of the Accused Instrumentality, Defendant has induced and continue to induce others to infringe at least claim 1 of the RE'365 Patent by making, selling, importing, installing, servicing, promoting, advertising, marketing, distributing, and/or offering for sale the Accused Instrumentalities for combination with HD TV, monitor, or projector for smart screen display by advertising, marketing, and distributing the Accused Products and by providing instructions for the use of the Accused Instrumentalities in an infringing manner as described above. Defendant is the indirect infringer and its customers and end users are direct infringers. Defendant therefore knowingly induced infringement and specifically intended to encourage and induce the infringement of the RE'365 by its customers.

30. On information and belief, since Defendant became aware of the infringement, and therefore had knowledge of RE'365 and of the infringement, at least as of the date of the service of the original Complaint, Defendant is and has been committing the act of contributory infringement by intending to provide the identified Accused Instrumentality to its customers knowing that it is a material part of the invention, knowing that its use was made and adapted for infringement of the RE'365 Patent as described above, and further knowing that the Accused Instrumentalities described above are not a staple article or commodity of commerce suitable for substantially noninfringing use. As described above, Defendant was aware that all material claim limitations are satisfied by the use and implementation of the Accused Instrumentality by Defendant's customers in the manner described above yet continued to provide the Accused Instrumentality to its customers knowing that it is a material part of the invention. As described above, since learning of the infringement, Defendant knew that the use and combination of the Accused Instrumentality with an HD TV, monitor, or projector for smart screen display by its customers was made and adapted for infringement of the RE'365 Patent. A new act of direct

infringement occurred each time a customer implemented and/or used the Accused Instrumentalities in the manner described above. After Defendant became aware that the use of the Accused Instrumentalities infringes at least one claim of the RE'365 Patent, Defendant knew that each such new use was made and adapted for infringement of at least one claim of the RE'365 Patent and Defendant continued to advertise and provide the Accused Instrumentality for such infringing activities. Furthermore, as described more fully above, the Accused Instrumentality has functionality designed to perform the steps in the manner described above and is therefore not a staple article or commodity of commerce suitable for substantially noninfringing use. On information and belief, Defendant has engaged in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement.

31. Plaintiff has been damaged as a result of Defendant's infringing conduct. Defendant is thus liable to Plaintiff for damages in an amount that adequately compensates Plaintiff for such Defendant's infringement of the RE'365, *i.e.*, in an amount that by law cannot be less than would constitute a reasonable royalty for the use of the patented technology, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

DEMAND FOR JURY TRIAL

Pursuant to Federal Rule of Civil Procedure, Mobile Motherboard Inc. demands a trial by jury on all issues triable by jury.

PRAYER FOR RELIEF

Plaintiff Mobile Motherboard Inc. prays for judgment:

- A. Judgment that Defendant infringed, either literally and/or under the doctrine of equivalents, one or more claims of the RE'365 Patent;

- B. Judgment that Defendant account for and pay to Mobile Motherboard Inc. all damages to and costs incurred by Mobile Motherboard Inc. because of their infringing activities and other conduct complained of herein, together with pre-judgment and post-judgment interest and costs as fixed by the Court;
- C. An accounting of all infringing acts including, but not limited to, those acts not presented at trial;
- D. A permanent injunction enjoining the aforesaid acts of infringement by Defendant, its officers, agents, servants, employees, subsidiaries and attorneys, and those persons acting in concert with Defendant, including related individuals and entities, customers, representatives, OEMs, dealers, distributors and importers;
- E. Adjudging that Defendant's infringement of the RE'365 Patent was willful and trebling all damages awarded to Mobile Motherboard Inc. for such infringement pursuant to 35 U.S.C. § 284;
- F. Declaring this case to be exceptional within the meaning of 35 U.S.C. § 285 and awarding Mobile Motherboard Inc. the attorney fees, costs, and expenses it incurs in this action; and
- G. Awarding Mobile Motherboard Inc. such other and further relief as the Court deems just and proper.

May 5, 2023

Respectfully Submitted,

/s/ David R. Bennett

David R. Bennett

(Admitted to the U.S. Dist. Ct. for the W.D. Texas)

Direction IP Law

P.O. Box 14184

Chicago, IL 60614-0184

(312) 291-1667

dbennett@directionip.com

Attorneys for Plaintiff Mobile Motherboard, Inc.